May 10 - 12, 2022

NATIONAL CONFERENCE

Monarch Migration & Multilingualism
Teaching Content and Language in Tandem
TUESDAY, MAY 10

Registration
Welcome Reception
Stargazing Event

4:00 P.M. - 7:00 P.M.

7:45 P.M.

WEDNESDAY, MAY 11 & THURSDAY, MAY 12

Registration & Breakfast
Keynote
Sessions & Roundtables
Lunch
Sessions & Roundtables
Keynote
Closing
Event Field Trip (Wednesday Only)

08:00 A.M. - 08:45 A.M.
08:45 A.M. - 10:00 A.M.
10:30 A.M. - 11:15 A.M.
11:30 A.M. - 12:15 P.M.
12:15 P.M. - 01:15 P.M.
01:15 P.M. - 02:00 P.M.
02:30 P.M. - 03:45 P.M.
04:00 P.M. - 04:30 P.M.
04:30 P.M. - 06:30 P.M.
KEYNOTE SPEAKERS DAY 1

All Keynote presentations will take place in the Ballroom

New Perspectives on Monarch Butterfly Migration

Monarch butterflies (Danaus plexippus) are renowned for their annual transcontinental migration where they fly thousands of miles each fall to overwinter at specific sites in central Mexico. How did this come to be? One of our approaches to this question is to study the unique features of monarch migration. The mechanisms (behavioral, genetic, and molecular) required for migrants to perform this trip, particularly to na"ively identify their overwintering sites with remarkably high fidelity, are unknown. I will discuss efforts from our lab that aim to extend our understanding of how this remarkable feat occurs.

Dr. D. André Green II is an Assistant Professor of Ecology and Evolutionary Biology at the University of Michigan, Ann Arbor, as well as a National Geographic Explorer. Our group studies the development and evolution of phenotypically plastic traits in insects in order to illuminate proximate mechanisms that promote or constrain the generation of biodiversity. We currently study monarch butterfly migration as a multi-scale model, with specific interests in multisensory integration, eco-genomics, and migration evolution.

Foundations and Strategies for Effective Language and Content Area Instruction for ELLs

In this presentation Dr. Wright will provide an introduction to the foundations of providing effective instruction for English language learners. He will highlight research-supported strategies and techniques with a specific focus on helping ELLs develop their oral language and literacy skills in English, and strategies for making content area instruction comprehensible while supporting students English language development.

Dr. Wayne E. Wright, a graduate from ASU, is the Associate Dean for Research, Graduate Programs, and Faculty Development, and is a Professor and the Barbara I. Cook Chair of Literacy and Language with an emphasis on ELL Education in the College of Education at Purdue University. He has many years of experience training pre-service and in-service teachers in the areas of language, literacy, content-area instruction and assessment of English language learners. He has extensive K-12 teaching experience with English Learners. He is the author of Foundations for Teaching English Language Learners: Research, Theory, Policy, and Practice (3rd ed.), and co-author of Foundations of Bilingual Education and Bilingualism (7th ed.), two widely used textbooks at universities across the USA and around the world. He is also Co-Editor of the Journal of Language, Identity, and Education.
SESSION ONE
10:30 A.M. - 11:15 A.M.

Tucson
Divergent Migration Destinations and Multiple Overwintering Strategies of Monarch Butterflies in the Southwestern United States (All Grade Levels) ~ Gail Morris
A cadre of Citizen Scientists tagged over 20,000 monarchs, unveiling a treasure of new insights about the monarch migration in Arizona and the Southwestern United States. Learn about the challenges of their migration and breeding in the region and how everyone can create ideal habitats to help monarchs thrive.

Monarch Mystic Migration (Elementary) ~ Ana Parra
Every fall a mysterious event takes place, the annual Monarch butterfly migration to Mexico. Millions of Monarchs fly across eastern North America to an astonishing small region in Mexico in the Oyamel ("o-ee-ya-mel") Fir Forest. How the butterfly finds this place that the butterfly has never been to before is one of nature’s greatest wonders. In this presentation/workshop session participants will investigate the mystery of how the monarch finds its way to Mexico each year. The lesson presented will show how students can explore a phenomenon and explore a hypothesis scientists use to theorize, explore, and ponder this mystery.

Flagstaff
Caterpillars to Butterflies: Growing Independence and Connecting Concepts for Diverse Learners (Middle School) ~ Ashley Coughlin
This interactive session will help provide teachers with concrete and easy to replicate strategies and resources to engage diverse learners in content area instruction. These strategies will help to build student confidence and independence by providing easily scalable scaffolding into best practice instruction already happening in the classroom. Technology is not necessary, but may augment the session. Access to templates will be provided.

Prescott
Microscopic Earth (All Grade Levels) ~ Dr. Niccole Cerveny
Join in for an engaging, hands-on discovery of physical geography through the use of hand-held microscopes. You will learn how to use the microscope, investigate and identify sand samples from around the world, and brainstorm potential lesson plans. You will need an electronic device (phone or tablet) equipped with a camera. If you are willing to engage more deeply, an optional investigative "field-trip" is planned to follow the presentation.

Red Rocks
And, Action! Designing Civic Action Plans for your Classroom (All Grade Levels) ~ Dianne McKee
Dive in for an exciting exploration on how to facilitate a Civics Action Project (CAP) in your classroom! Through hands-on activities, CAP examples, and small and whole group discussions, you will learn about various pedagogical approaches to deepen the CAP experience and connect to geography. You will leave with inspirational ideas and step-by-step instructions on how to create a CAP. You will also learn about GeoCivics resources and professional development opportunities. GeoCivics is funded by the US Department of Education and operates through the Mary Lou Fulton Teachers College at Arizona State University.
Wonders of the World, Exploring Living Creatures  
(Middle School, High School) ~ Claudia Bachmann-Bouchard  
Life is what makes the world a unique place. Learning the characteristics of living and non-living things is one of the first lessons that students need to learn and understand in science. Identifying and analyzing the characteristics of living things and their classification is the foundational base for science. In this lesson, students will be able to research and categorize different types of micro and macro organisms by their characteristics and classification. This lesson contains strategies for diverse learners (ELLs).

Got to Go! Got to Go! Protecting the Monarch Butterflies  
( Elementary) ~ Maria Green  
Earth supports a large variety of organisms. One of these organisms is the Monarch butterfly. In this lesson the students will learn the life cycle of the Monarch and identify why the Monarch population is rapidly decreasing. The students will become knowledgeable about the Monarch butterfly cycle; they will analyze information, data, maps, and the changes in the Monarch population. They will be active participants in the conservation of the Monarch’s habitat by planting milkweed.

Family Engagement Using Games: Click and Learn (All Grade Levels) ~ Bob Reynolds  
See how you can help your students use our geography games to quickly learn continents, oceans, countries around the world, all 50 states, and counties of Arizona. You can help your students learn, for example, South America countries in about 24 minutes... or names and locations of the 50 States in one evening.

Teacher Roundtable -- Making Student Research Relevant  
1) Renewable and Non- Renewable Sources of Energy (Elementary) ~ Anju Kharbanda  
We want our future generation to be sensitive to the harmful impact of the overuse of fossil fuels on climate change. The essential question of the lesson is “What is the impact of overconsumption of nonrenewable energy and how can we avoid it”. The students will connect the concept of renewable resources in their own life and present alternatives to solve the problems of climate change and global warming.

2) Location, Location, Location: The Perfect Home for an Ocean Animal (Elementary)  
~ Monica Lizarraga  
Humans may have little or many things in common with ocean animals. Students need to understand what makes us different from ocean animals and how they can survive under the sea. Students will construct an argument to classify ocean animals into five different groups they will learn about why Simon was going to survive in the ocean and compare those needs to humans.

3) Making Research Relevant: 187º Farenheit! Exploring Peru's Boiling River (All Grade Levels)  
~ Caitlyn Ishaq  
Come explore the mystical boiling river of the Peruvian Amazon as a way to make research relevant for students. This presentation uses Peru's Boiling River along with local geothermal features in order to make research relevant for students. STEMSS Strategies showcased in this lesson include Word Walls and Big Books. This is a fun and engaging lesson for high school students that can easily be adapted to any grade level.
Teacher Roundtable -- Water and Environmental Impacts Lessons
1) Urban, Suburban, and Rural: Monsoon Effects (Elementary) ~ Lizeth Herrera
In this lesson, students will look at the characteristics of urban, suburban, and rural areas and use this information to examine a weather-related problem: Arizona’s monsoon season. How does this season affect our different landscapes? What are solutions to some of the weather-related problems that occur during the monsoon season? This lesson includes adaptations for diverse learners (ELLs).

2) Oil Spill (Elementary) ~ Anna Burr
A student activity that has students recreate an oil spill and how they would use tools to clean the oil spill to protect the environment/animals.

3) A Watershed Moment (Elementary) ~ Ashley Alarcon
In this lesson, students will have an opportunity to create a model of a watershed and verbally identify its parts and the flow of water while making connections to the state of Arizona. In addition, it includes having students verbally identify their watersheds parts and the flow of water while making connections to the state of Arizona. It is interactive, and includes opportunities for students to use their bodies to define the key vocabulary.

Thinking about a Doctorate: Answering Questions about Ed.D., and Ph.D. Pathways (All Grade Levels) ~ Rosalsela Rodriguez & Dr. Margarita Jimenez-Silva
Are you considering a doctorate degree in the near future? Ever wonder about the difference between a Ph.D. and an Ed.D. degree? Come engage in an interactive presentation about doctoral programs. We will also present specific information about the Ph.D. and Ed.D. programs at the University of California Davis and Arizona State University.
MUSICAL KEYNOTE SPEAKER

All Keynote presentations will take place in the Ballroom

¡Bailamos! Monarchs and Music with MISTER G

Join us for a unique musical keynote with Latin GRAMMY Award winning musician and author of Señorita Mariposa, MISTER G (Ben Gundersheimer). MISTER G will be performing his original bilingual songs, and sharing his journey from classroom teacher to acclaimed international touring artist. Come ready to sing and dance in this dynamic, interactive concert. ¡A gozar!

Ben Gundersheimer (MISTER G) is a Latin GRAMMY Award-winning artist, author, activist and educator. Hailed as “a bilingual rock star” by the Washington Post and called “irresistible” by People magazine, he was originally dubbed MISTER G by his young students while pursuing a Master of Education degree. His dynamic, interactive bilingual performances aim to dissolve borders and foster cross-cultural connections.  www.mistergsongs.com

MISTER G
(Ben Gundersheimer)
04:00 P.M. - 04:30 P.M.

CONFERENCE FIELDTRIP

A Microscopic Discovery of the Butterfly Gardens

Please meet on the Sunset Terrace

A continuation of the Microscopic Earth presentation OR a new and engaging way to discover the outdoors. Join us for a multi-scale exploration of the resort grounds and the location of the new butterfly gardens. You will be using the Active Eye universal cell phone microscope, therefore you must have a device with a camera in order to fully participate. We will explore the outdoors with some specific tasks as well as some time for “free” exploration. No butterflies will be harmed in this activity. However, you can even explore the soil as you plant a butterfly attractant! There will be a discussion in the field following the activity with an opportunity to share how you might use this device with your students and a chance to win bragging rights for the coolest item found.

Field Guide:
Dr. Niccole Villa Cerveny
04:30 P.M. - 06:30 P.M.
The Educational Value of Storytelling

Drawing from his personal experience of growing up in a family of Mexican migrant workers and from professional experiences in teaching for over 40 years, and serving on the California Commission for Teacher Credentialing for ten years, he will discuss why it's essential for educators to teach and transmit stories by and about the different populations of immigrants to this country. Dr. Jiménez will explain how these experiences inform his writing and describe his writing process for storytelling.

Author and educator, Francisco Jiménez emigrated from Tlaquepaque, Mexico to California and as a child worked alongside his parents in the fields of California. He received his MA and Ph.D. from Columbia University and is currently Professor Emeritus in the Department of Modern Languages and Literatures at Santa Clara University. His work has been recognized by the United States Congress, the State Department of Education, the California State Senate and the Governor and Minister of Culture of the State of Jalisco. He has won several national literary awards, including the John Steinbeck Award, the Boston Globe-Horn Book Award, the Américas Award, the Pura Belpré Honor, and the Tomás Rivera Book Award among others. His four-book series—The Circuit, Breaking Through, Reaching Out, Taking Hold—has been included in the American Library Association Booklist's 50 Best Young Adult Books of All Time.

Stories of Strength and Impact from STEMSS CRUISE EL

Across the 5 years of the STEMSS CRUISE EL NPD grant project, we have heard countless stories from teachers about how they have been impacted. We built a community of support and strength centered around our commitment to serving our K-12 English learners/emergent bilinguals. We are thankful for this community and the amazing work that our participants engage in on a daily basis. Come celebrate the stories of strength and impact with us as we close out our conference and look forward to future collaborations.

Dr. Margarita Jimenez-Silva is a Professor and Chair of Teacher Education at the University of California, Davis. Prior to entering higher education, she worked with newcomer students as a middle-school math and science teacher. Her research focuses on preparing and supporting teachers to work with culturally and linguistically diverse learners, especially in addressing emergent bilinguals’ linguistic and academic content development. Her research has been published by journals such as Harvard Educational Review, Childhood Education, and the Journal of Research on Childhood Education. She is co-editor of Culturally Sustaining and Revitalizing Pedagogies: Language, Culture, and Power and Voices of Students, Teachers, Teacher Educators, and Education Allies in Challenging Sociopolitical Times. Her research has been supported by the National Science Foundation and the U.S. Department of Education. A graduate of Concordia University Irvine, she holds Master and Doctor of Education degrees from the Harvard Graduate School of Education.
Storytelling through Song with Latin GRAMMY Award winning artist and author of Señorita Mariposa (Elementary) ~ **MISTER G (Ben Gundersheimer)**
In this dynamic, interactive, workshop, MISTER G (Ben Gundersheimer, M.Ed) will be sharing his philosophy of the importance of storytelling and music as powerful tools for facilitating learning and deepening engagement in the bilingual classroom. [www.mistergsongs.com](http://www.mistergsongs.com)

Native American Heritage Month/Indigenous People's Day (All Grade Levels) ~ **Melissa Mercado**
Not sure what to teach during Native American Heritage Month or Indigenous People's Day? Come learn about how to stay culturally responsive and inclusive of Indigenous people during these learning opportunities. Experience and discuss a few mini lessons that can be incorporated in your classroom all year round.

TWRLS of Engagement: Math (Elementary, Middle School) ~ **Nicole Teyechea McNeil and Jill Crossley**
Who is doing the work? As teachers we want students to do the work but we also want them to be successful, especially English Learners. This session focuses on increasing student engagement while teaching habits of good mathematicians. Strategies provide opportunities for students to increase comprehension of math skills while simultaneously developing a second language. Participants will use technology and instructional techniques to integrate TWRLS into math lessons. TWRLS of engagement is an acronym for Thinking, Writing, Reading, Listening and Speaking.

Cultivating the Identity of Latina Middle Schoolers Through an Intersectional and Culturally Sustaining Framework (Elementary, Middle School) ~ **Tadria Cardenas-Rico & Mayra Nuñez**
Come learn about the process of creating a science curriculum that supports the science identity development of Latina Middle School girls using an intersectional framework. Join our discussion on how to facilitate conversations on race, ethnicity, socioeconomic status and gender identity with Latinx parents and their middle school daughters.

Vegetable Gardening Promoting Parent-Daughter Interactions: Enhancing Growth in Science, Language, and Positive Parent Support (Elementary, Middle School) ~ **Peter Rillero, Kim Rillero**
Describes curriculum and specific activities that were done in three iterations of a seven-week gardening program in Avondale, AZ and Woodland, CA. The program was for 5th and 6th Latina grade girls and their parents. It included garden planning, seed planting, care and measurement, harvesting, and a tostada party. Concurrently, other activities correlated with the garden focusing on roots, leaves, surface area, soil, and other organisms. The program was presented in both English and Spanish.

Consortium Meeting Part 1 (All Grade Levels) ~ **Dr. Margarita Jimenez-Silva**
Our STEMSS CRUISE EL Consortium is a strong community of support across numerous stakeholders in the education of English Learners/Emergent Bilinguals. Come learn about the Consortium has accomplished and engage in conversation about how to sustain the work beyond the grant funding period.
Designing Virtual Experiences for Learning Language and Culture (All Grade Levels) ~ Jill Castek & Zueyzan Pineda
This session features the design and implementation of International Immersive Field Experiences to support language, culture, and global connections. Examples created by teachers for use in their classrooms will show the flexibility of this approach across the curriculum. Using immersive 360 images and the integration of video and audio content, language learning comes to life. Design considerations as well as perspectives from teachers and learners’ experiences with designing immersive content will be shared and discussed.

Fantastic Frogs: A Study of Adaptations - Big Books (Elementary) ~ Arlette Johnson
In Fantastic Frogs, students learn about frog adaptations and how important they are for the frog's survival. During the course of this lesson, students work in groups to investigate five frogs and create a group poster that includes a labeled diagram of the frog and its adaptations, and geographic information that explains how the environment the frog lives in coincides with the adaptations needed for its survival. This lesson contains opportunities for collaborative group work, peer teaching, modified text, and big book strategies for teaching diverse learners.

Storytelling Workshop: Telling Our Stories (All Grade Levels) ~ Karen Guerrero, Margarita Jimenez-Silva, Dawn Lambson and Keynote Speakers
This session highlights stories being told throughout the conference thus far and serve as a hands-on opportunity to begin or add on to your own story. Looking towards reflecting on the impact of the STEMSS grant, we hope participants to begin brainstorming and/or writing their story as we look towards publishing an article or book sharing our stories with a broader audience.

Teacher Roundtable -- Strategies/Approaches to Support Comprehension
1) Science Scavenger Hunt (Middle School) ~ Claudia Bachmann-Bouchard
Often times families and caregivers do not realized the impact that they have in building vocabulary in activities that they do everyday. By doing these activities families and caregivers will learn what an important role they have.

2) R.R.E.Q.U.E.S.T. STRATEGY (All Grade Levels) ~ Nidhi Gupta
This roundtable will introduce and explain a teacher developed and tested strategy to enhance reading comprehension.

3) Relationship of Latitude and Longitude to Coordinate Planes (Elementary) ~ Yogeeta Sharma
In this lesson, students will make a real world connection between graphing on a coordinate plane and locating places on earth using degrees of latitude and longitude. The lesson contains adaptations for diverse learners (ELLs).

Consortium Meeting Part 2 (All Grade Levels) ~ Dr. Margarita Jimenez-Silva
Our STEMSS CRUISE EL Consortium is a strong community of support across numerous stakeholders in the education of English Learners/Emergent Bilinguals. Come learn about the Consortium has accomplished and engage in conversation about how to sustain the work beyond the grant funding period. Continuing the conversation from Part 1.
Explore the World and More With Ask a Biologist (All Grade Levels) ~ Dr. Charles Kazilek
Teleportation is not yet a reality, but we are getting closer with virtual experiences that allow you to take your students beyond the classroom. Come and take a trip and see the latest this free resource has for you and your students. Did we mention we also have content in 20 languages?

Language Development Through Project-Based STEMSS Instruction (Pre-K, Elementary) ~ Monica Baker & Tammy Nethercott
This session will explore the use of interdisciplinary, student-centered and theme-based instruction to engage multilingual learners in rigorous content. The workshop will provide a model for immersing students in rigorous, engaging STEMSS content while simultaneously providing language support.

Family STEM Night: Encouraging a School Communities’ Deeper Understanding of STEM (All Grade Levels) ~ Erica Hamel
As STEM has become a buzz word in education, explore how a Family STEM Night can help a school community deepen their understanding of the importance of STEM in students’ lives today. Participants will experience select Family STEM Night activities first hand, that can be taken back to their schools.

Teacher Roudtable: Using Maps to Explore African American Culture: Lesson Shareout
1) Wow! Juneteenth! (Elementary) ~ Nedre White
A lesson investigating Juneteenth in Texas and it’s expansion to a national holiday.
2) The Story of Allenville, Arizona: 1945-1978 (Middle School) ~ Andrea McWilliams
A lesson exploring how to use maps to understand the plight of the people of Allenville, a town on a flood plain.
3) The Penned Truth Through the Lens of the Project 1619 (Elementary, Middle School) ~ Charmaine Woods
A lesson mapping the route from Angola Africa to Fort Monroe, Virginia

Family Engagement Roundtable:
1) Game Night! (Elementary) ~ Jennifer Roman
This presentation will share ways to use STEMSS-based games to engage your students and their families in a fun, educational, and memorable family night event
2) FUNds of Knowledge: Engaging Families in Meaningful Events (All Grade Levels) ~ Ashley Coughlin
In this roundtable, we will explore family funds of knowledge and how to tap into family and community resources to better engage and support diverse learners. Leave the table with concrete action steps to planning and implementing a family event that will leave you and your families feeling rejuvenated instead of worn out and empowered instead of overwhelmed.
3) STEAMSS Family Event (Elementary) ~ Sheela Shukla
The presentation will focus on all of the four domains, listening, reading, writing and speaking. The audiences will be able to create hands-on activities by integration all the STEAMSS components.
4) Family Engagement PD and Classroom Implementation (Elementary and Middle) ~ Dr. Karen Guerrero
STEMSS Professional development resources will be shared; all of which can be done in the classroom or as family engagement events both in-person and online. A take-home kit will demonstrate how using simple household items can enrich STEMSS instruction and facilitate engaging conversations with students and families around geography across the curriculum.
Special Thanks

To all the teachers, support staff, administrators, key stakeholders, community members, and education allies, we want to give a special thanks for all the work you put into supporting our future leaders! This conference is to celebrate, share, collaborate, and plan for future work to ensure a better tomorrow.

YOU make a difference!

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The STEMSS CRUISE EL Grant acknowledges the twenty-two Native Nations that have inhabited this land for centuries. Arizona State University's four campuses are located in the Salt River Valley on ancestral territories of Indigenous peoples, including the Akimel O'odham (Pima) and Pee Posh (Maricopa) Indian Communities, whose care and keeping of these lands allows us to be here today.

The STEMSS CRUISE EL Grant is supported by the School of Geographical Sciences & Urban Planning (SGSUP) whose facilities are located upon the homelands of the Akimel O'odham and Pee Posh peoples. The SGSUP faculty and staff express gratitude for their stewardship of the land currently occupied by our school. SGSUP is dedicated to cultivating relationships with local Native Nations and providing a welcoming environment for Native American Students.